

What is claimed is:

1. An electrolytic capacitor comprising:

5 a positive foil provided at the surface with a dielectric coating;

a negative foil opposing to the positive foil;

a separator containing at least either one of rayon fiber and cotton linter, disposed between the positive foil and the negative foil; and

10 a polymeric electrolyte composite conducting an ion between the positive foil and the negative foil, the polymeric electrolyte composite including;

15 an electrolyte formed of a polar solvent and at least one among inorganic acids, organic acids and salts of the inorganic, organic acids containing neither metal ion nor quaternary ammonium ion as a cation,

an acrylic ester copolymer containing the electrolyte, the copolymer made of;

20 a first monomer of acrylic derivative formed of at least one among the group of monofunctional monomers having hydroxyl group at the end and one polymeric unsaturated double bond, and

25 a second monomer of acrylic derivative formed of at least one among the group of multifunctional monomers having a plurality of polymeric unsaturated double bond.

2. The electrolytic capacitor of claim 1, wherein the separator further includes a cellulose fiber.

5 3. The electrolytic capacitor of claim 2, wherein the cellulose fiber includes at least one among the group of Manila jute, kraft, hemp and esparto.

4. The electrolytic capacitor of claim 2, wherein the
10 separator is formed of a mixture of at least either one of the rayon fiber and cotton linter, and the cellulose fiber.

5. The electrolytic capacitor of claim 1, wherein the separator is made of a plurality of sheets overlaid, at least
15 either one of the plurality of sheets is sheet (A) which contains at least either one of the rayon fiber and the cotton linter.

6. The electrolytic capacitor of claim 5, wherein each of
20 the plurality of sheets contains at least either one of the rayon fiber and the cotton linter.

7. The electrolytic capacitor of claim 5, wherein at least
25 any one of the plurality of sheets other than the sheet (A) is formed of a cellulose fiber.

8. An electrolytic capacitor comprising:
a positive foil provided at the surface with a dielectric

coating;

a negative foil opposing to the positive foil;

a separator made of a plurality of overlaid sheets each
formed of a cellulose fiber, disposed between the positive foil
5 and the negative foil; and

a polymeric electrolyte composite conducting an ion
between the positive foil and the negative foil, the polymeric
electrolyte composite including;

an electrolyte formed of a polar solvent and at
10 least one among inorganic acids, organic acids and salts
of the inorganic, organic acids containing neither metal
ion nor quaternary ammonium ion as a cation,

an acrylic ester copolymer containing the
electrolyte, the copolymer made of;

15 a first monomer of acrylic derivative
formed of at least one among the group of
monofunctional monomers having hydroxyl
group at the end and one polymeric
unsaturated double bond, and

20 a second monomer of acrylic
derivative formed of at least one among the
group of multifunctional monomers having a
plurality of polymeric unsaturated double
bond.

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9. The electrolytic capacitor of claim 1, wherein the basis
weight of the separator is at least 0.01g/m^2 , at most 55g/m^2 .

10. The electrolytic capacitor of claim 8, wherein the basis weight of the separator is at least 0.01g/m^2 , at most 55g/m^2 .

5 11. The electrolytic capacitor of claim 9, wherein the separator is provided with a reinforcement processing.

12. The electrolytic capacitor of claim 10, wherein the separator is provided with a reinforcement processing.

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13. The electrolytic capacitor of claim 1, wherein the solute is at least one selected from the group of ammonium salt, primary amine salt, secondary amine salt, tertiary amine salt and amidine salt.

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14. The electrolytic capacitor of claim 8, wherein the solute is at least one selected from the group of ammonium salt, primary amine salt, secondary amine salt, tertiary amine salt and amidine salt.

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15. The electrolytic capacitor of claim 1, wherein the positive foil is provided with tunnel-like pits stretching from the surface in the depth direction.

25 16. The electrolytic capacitor of claim 8, wherein the positive foil is provided with tunnel-like pits stretching from the surface in the depth direction.